

Title (en)  
ULTRAVIOLET-SCREENING ZINC OXIDE EXCELLENT IN TRANSPARENCY AND COMPOSITION CONTAINING THE SAME

Title (de)  
SEHR TRANSPARENTE ULTRAVIOLET FILTRIERENDES ZINKOXID UND DIESE ENTHALTENDE ZUSAMMENSETZUNG

Title (fr)  
OXYDE DE ZINC FILTRANT L'ULTRAVIOLET A EXCELLENTE TRANSPARENCE, ET COMPOSITION A BASE DE CET OXYDE

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Application  
**EP 98953076 A 19981117**

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Abstract (en)  
The present inventors conducted investigations in order to develop a metal oxide which enables effective UV-screening; i.e. which has excellent screening ability against ultraviolet rays, particularly against long-wavelength ultraviolet rays, as well as excellent visible-light transmission; and to provide a UV-screening composition that contains the metal oxide and can be applied to external use. As a result, the present inventors have found that zinc oxide produced by a particular method has a characteristic form; i.e., primary particles having an average particle diameter of 50-100 nm aggregate in a planer shape, and a ratio represented by  $\ln T_{360\text{nm}}/\ln T_{400\text{nm}}$  ( $T_{x\text{nm}}$ : transmittance of transmitted light of X nm) of 10 or more, and exerts excellent screening effect against long-wavelength ultraviolet rays as well as excellent visible-light transmission. The present invention has been accomplished based on this finding. The zinc oxide of the present invention effectively exerts the above-described excellent characteristics; i.e. UV-screening effect and transparency, and can be applied to a composition for external use such as make-up cosmetics or sunscreen cosmetics.  
<IMAGE>

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IPC 8 full level  
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